

**ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD  
REPEALING, RENUMBERING, AMENDING, REPEALING AND RECREATING, AND CREATING  
RULES**

The Natural Resources Board proposes an order to repeal NR 809.545(5), 809.547(1)(h), 809.55(1)(c)3.; to renumber NR 809.545(6) to (8), 809.548(5)(b) to renumber and amend NR 809.547(1)(i) and 809.549(5)(a); to amend NR 809.04 (4), (47), (48), (57) and (78), 809.542(2)(intro.), (b)(intro.), and (c), 809.545(2) and (4), 809.546(1)(title), (intro.), and (d)2.e., (3)(b)(intro.), 1. to 3.(intro.), (d)(intro.) and 2., 809.547(1)(e) and (g), (2)(a) and (b), (3) and (4)(d)2. to 4., 809.548(1)(b)2., (3)(b)(intro.), (4) and (5)(e), 809.549(1)(a), (5)(a) and (b), 809.55(1)(c)(intro.) and 4.; to repeal and recreate NR 809.543(8), 809.547(4)(d)5., 809.55(1)(c)2. and (d) to (g), (d) and (6); and to create NR 809.04(intro.), 809.542(2)(c)1. to 5., 809.545(4)(a) and (b), 809.546(1m), (3)(b)5., (g) and (h), 809.547(2)(e), (4)(d)4.a. and b., 6. to 8., (6) and (7), 809.548(3)(c) and (5)(b)2., 809.549(1)(a)1. to 4. and (note), (5)(a)1. to 2., and (b)1. to 2., 809.55(1)(c)8. and (8) relating to lead and copper monitoring and treatment requirements.

DG-45-00

Analysis Prepared by the Wisconsin Department of Natural Resources

Statutory authority: ss. 280.11 and 281.17(8), Stats.  
Statutes interpreted: ss. 280.11 and 281.17(8), Stats.

The United States Environmental Protection Agency (US EPA) published amendments to 40 CFR 141, 142 and 143 on January 12, 2000. Section 281.17(8), Stats., and our primacy agreement with US EPA require us to adopt rules no less stringent than federal rules. The proposed changes to ch. NR 809 update it to reflect changes in 40 CFR, and are necessary to assure that our administrative rules are consistent with federal rules.

These Safe Drinking Water Act amendments published by US EPA on January 12, 2000, do not develop new rules, but eliminate unnecessary requirements, streamline and reduce reporting burden, and promote consistency in implementation.

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SECTION 1. NR 809.04(intro.) is created to read:

NR 809.04(intro.) In this chapter:

SECTION 2. NR 809.04 (4), (47), (48), (57) and (78) are amended to read:

NR 809.04(4) "Community water system" or "CWS" means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. Any public water system serving 7 or more homes, 10 or more mobile homes, 10 or more apartment units, or 10 or more condominium units shall be considered a community water system unless information is available to indicate that 25 year-round residents will not be served.

(47) "Non-community water system" or "NCWS" means a public water system that is not a community water system. A non-community water system is either a non-transient, non-community water system or a transient non-community water system.

(48) "Non-transient non-community water system" or "NTNCWS" means a non-community water system that regularly serves at least 25 of the same persons over 6 months per year. Examples of non-transient non-community water systems include those serving schools, day care centers and factories.

(57)(a) "Public water system" or "system" or "PWS" means a system for the provision to the public of piped water for human consumption through pipes or other constructed conveyances, if the system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. A public water system is either a "community water system" or a "non-community water system." A system:

~~(b) Systems include the following:~~

~~1. Any (a) Includes any~~ collection, treatment, storage, and distribution facilities under control of the operator of the system and used primarily in connection with the system, ~~and~~ \_

~~2. Any (b) Includes any~~ collection or pretreatment storage facilities not under the system's control which are used primarily in connection with the system.

(c) ~~The term does~~ Does not include any "special irrigation district."

(78) "Transient non-community water system" or "TNCWS" means a non-community water system that serves at least 25 people at least 60 days of the year. Examples of transient non-community water systems include those serving taverns, motels, restaurants, churches, campgrounds and parks.

SECTION 3. NR 809.542(2)(intro.), (b), and (c) are amended to read:

NR 809.542(2) (intro.) DETERMINATION OF OPTIMUM CORROSION CONTROL. A system is deemed to have optimized corrosion control and is not required to complete the applicable corrosion control treatment steps ~~if the system satisfies one of the following criteria:~~ identified in this section if the system satisfies one of the criteria specified in par. (a) to (c). Any system deemed to have optimized corrosion control under this subsection, and which has treatment in place, shall continue to operate and maintain optimal corrosion control treatment and meet any requirements that the department determines appropriate to ensure optimal corrosion control treatment is maintained.

(b)(intro.) Any water system may be deemed by the department to have optimized corrosion control treatment if the system owner or operator demonstrates to the satisfaction of the department that it has conducted activities equivalent to the corrosion control steps applicable to the system under this section. If the department makes this determination, it shall provide the system with written notice explaining the basis for its decision and shall specify the water quality control parameters representing optimal corrosion control in accordance with s. NR 809.543(6). Water systems deemed to have optimized corrosion control under this paragraph shall operate in compliance with the department-designated optimal water quality control parameters in accordance with s. NR 809.543(8) and continue to conduct lead and copper tap and water quality parameter sampling in accordance with ss. NR 809.547(4)(c) and 809.548(4), respectively. A system owner or operator shall provide the department with the following information in order to support a determination under this subsection:

(c) Any water system is deemed to have optimized corrosion control if it submits results of tap water monitoring conducted in accordance with s. NR 809.547 and source water monitoring conducted in accordance with s. NR 809.549 that demonstrates for 2 consecutive 6-month monitoring periods that the difference between the 90<sup>th</sup> percentile tap water lead level computed under s. NR 809.541(3)(c), and the highest source water lead concentration, is less than ~~5 ug/l~~ the practical quantitation level for lead specified in 40 CFR 141.89(a)(1)(ii).

SECTION 4. NR 809.542(2)(c)1. to 5. are created to read:

NR 809.542(2)(c)1. The department may deem that systems whose highest source water lead level is below method detection limit have optimized corrosion control under this subsection if the 90<sup>th</sup> percentile tap water lead level is less than or equal to the practical quantitation level for 2 consecutive 6-month monitoring periods.

2. Any water system deemed to have optimized corrosion control in accordance with this subsection shall continue monitoring for lead and copper at the tap no less frequently than once every 3 calendar years using the

reduced number of sites specified in s. NR 809.547(3) and collecting the samples at times and locations specified in s. NR 809.547(4)(d)4. Any system that has not conducted a round of monitoring pursuant to s. NR 809.547(4)(d) since September 30, 1997, shall complete a round of monitoring pursuant to this subsection as specified by the department.

3. Any water system deemed to have optimized corrosion control pursuant to this paragraph shall notify the department in writing pursuant to s. NR 809.55(1)(f) of any change in treatment or the addition of a new source. The department may require any system to conduct additional monitoring or to take other action the department deems appropriate to ensure that systems maintain minimal levels of corrosion in the distribution system.

4. As of the effective date of this rule ...[revisor insert date], a system is not deemed to have optimized corrosion control under this subsection, and shall implement corrosion control treatment pursuant to subd. 5. unless it meets the copper action level.

5. Any system triggered into corrosion control because it is no longer deemed to have optimized corrosion control under this subsection shall implement corrosion control treatment in accordance with the deadlines in sub. (5). Any large system shall adhere to the schedule specified in that paragraph for medium-size systems, with the time periods for completing each step being triggered by the date the system is no longer deemed to have optimized corrosion control under this subsection.

SECTION 5. NR 809.543(8) is repealed and recreated to read:

NR 809.543(8)(intro.) CONTINUED OPERATION AND MONITORING. All system owners or operators optimizing corrosion control shall continue to operate and maintain optimal corrosion control treatment, including maintaining water quality parameters at or above minimum values or within ranges designated by the department under sub. (7), in accordance with this subsection for all samples collected under s. NR 809.548(4) to (6). Compliance with the requirements of this subsection shall be determined every 6 months, as specified under s. NR 809.548(4). A water system is out of compliance with the requirements of this subsection for a 6-month period if it has excursions for any department-specified parameter on more than 9 days during the period. An excursion occurs whenever the daily value for one or more of the water quality parameters measured at a sampling location is below the minimum value or outside the range designated by the department. The department may delete results of obvious sampling errors from this calculation. Daily values are calculated as follows:

(a) On days when more than one measurement for the water quality parameter is collected at the sampling location, the daily value shall be the average of all results collected during the day regardless of whether they are collected through continuous monitoring, grab sampling or a combination of both. If EPA has approved an alternative formula under 40 CFR 142.16 in the department's application for a program revision submitted pursuant to 40 CFR 142.12, the department's formula shall be used to aggregate multiple measurements taken at a sampling point for the water quality parameter in lieu of the formula in this paragraph.

(b) On days when only one measurement for the water quality parameter is collected at the sampling location, the daily value shall be the result of that measurement.

(c) On days when no measurement is collect for the water quality parameter at the sampling location, the daily value shall be the daily value calculated on the most recent day on which the water quality parameter was measured at the sample site.

SECTION 6. NR 809.545(2) and (4) are amended to read:

NR 809.545(2) A system owner or operator shall replace annually at least 7% of the initial number of lead service lines in its distribution system. The initial number of lead service lines is the number of lead lines in place at the time the replacement program begins. The system owner or operator shall identify the initial number of lead service lines in its distribution system based upon a materials evaluation, including an identification of the portions owned by the system, based on a materials evaluation, including the evaluation required under s. NR 809.547(1) and

relevant legal authorities, such as contracts and local ordinances regarding the portion owned by the system. The first year of lead service line replacement shall begin on the date the action level was exceeded in tap sampling referenced in sub. (1).

(4) A water system owner or operator shall replace the entire service line, up to the building inlet, unless he or she demonstrates to the satisfaction of the department under sub. (5), that he or she controls less than the entire service line. In such cases, the system owner or operator shall replace the portion of the line which the department determines is under the system owner or operator's control. The system owner or operator shall notify the user served by the line that the system owner or operator will replace the portion of the service line under his or her control and shall offer to replace the building owner's portion of the line, but is not required to bear the cost of replacing the building owner's portion of the line. ~~For buildings where only a portion of the lead service line is replaced, the water system owner or operator shall inform the residents that the system owner or operator will collect a first flush tap water sample after partial replacement of the service line is completed if the residents so desire. In cases where the residents accept the offer, the system owner or operator shall collect the sample and report the results to the residents within 14 days after the sample was collected.~~ A system owner or operator is not required to bear the cost of replacing the privately-owned portion of the line, nor is the owner or operator required to replace the privately-owned portion where the owner chooses not to pay the cost of replacing the privately-owned portion of the line, or where replacing the privately-owned system would be precluded by state, local or common law. An owner or operator of a water system that does not replace the entire length of the service line shall also complete the following tasks:

SECTION 7. NR 809.545(4)(a) and (b) are created to read:

NR 809.545(4)(a) At least 45 days prior to commencing with the partial replacement of a lead service line, the water system owner or operator shall provide notice to the residents of all buildings served by the line explaining that they may experience a temporary increase of lead levels in their drinking water, along with guidance on measures consumers can take to minimize their exposure to lead. The department may allow the water system owner or operator to provide notice under this paragraph less than 45 days prior to commencing partial lead service line replacement where the replacement is in conjunction with emergency repairs. In addition, the water system owner or operator shall inform the residents served by the line that the system will, at the system's expense, collect a sample from each partially-replaced lead service line that is representative of the water in the service line for analysis of lead content, as prescribed under s. NR 809.547(2)(c), within 72 hours after the completion of the partial replacement of the service line. The system owner or operator shall collect the sample and report the results of the analysis to the owner and each resident served by the line within 3 business days. Mailed notices post-marked within 3 business days of receiving the results shall be considered "on time."

(b) The water system owner or operator shall provide the information required by par. (a) to the residents of individual dwellings by mail or by other methods approved by the department. In instances where multi-family dwellings are served by the line, the water system owner or operator may post the information at a conspicuous location.

SECTION 8. NR 809.545(5) is repealed.

SECTION 9. NR 809.545(6), (7) and (8) are renumbered (5), (6) and (7).

SECTION 10. NR 809.546(1)(title) and (intro.) are amended to read:

NR 809.546(1)(title) COMMUNITY WATER SYSTEMS - CONTENT OF WRITTEN PUBLIC EDUCATION MATERIALS. (intro.) A community water system owner or operator shall include the following text in all of the printed materials it distributes through its lead public education program. System owners or operators may delete information pertaining to lead service lines, upon approval by the department, if no lead service lines exist anywhere in the water system service area. Public education language under par. (d) 2.e. and 4.c. may be modified regarding building

permit record availability and consumer access to these records, if approved by the department. System owners or operators may also continue to utilize pre-printed materials that meet the public education language requirements in s. NR 809.546(1), effective August 1, 1993. Any additional information presented by a system owner or operator shall be consistent with the following information below and be in plain English that can be understood by laypersons.

SECTION 11. NR 809.546(1)(d)2.e. is amended to read:

NR 809.546(1)(d)2.e. Determine whether or not the service line that connects your home or apartment to the water main is made of lead. The best way to determine if your service line is made of lead is by either hiring a licensed plumber to inspect the line or by contacting the plumbing contractor who installed the line. You can identify the plumbing contractor by checking the city's record of building permits which should be maintained in the files of the [insert name of department that issues building permits]. A licensed plumber can at the same time check to see if your home's plumbing contains lead solder, lead pipes or pipe fittings that contain lead. The public water system that delivers water to your home should also maintain records of the materials located in the distribution system. If the service line that connects your dwelling to the water main contributes more than 15 ppb to drinking water, after our comprehensive treatment program is in place, we are required to replace the portion of the line we own. If the line is only partially ~~controlled~~ owned by the [insert name of the city, county, or water system that controls the line], we are required to provide ~~you~~ the owner of the privately-owned portion of the line with information on how to replace ~~your~~ the privately-owned portion of the service line, and offer to replace that portion of the line at ~~your~~ the owner's expense ~~and take a follow-up tap water sample within 14 days of the replacement. If we replace only the portion of the line that we own, we also are required to notify you in advance and provide you with information on the steps you can take to minimize exposure to any temporary increase in lead levels that may result from the partial replacement, to take a follow-up sample at our expense from the line within 72 hours after the partial replacement, and to mail or otherwise provide you with the results of that sample within three business days of receiving the results.~~ Acceptable replacement alternatives include copper, steel, iron and plastic pipes.

SECTION 12. NR 809.546(1m) is created to read:

NR 809.546(1m) NON-TRANSIENT NON-COMMUNITY WATER SYSTEMS - CONTENT OF WRITTEN PUBLIC EDUCATION MATERIALS. A non-transient non-community water system shall either include the text specified in sub. (1) or shall include the text in pars. (a) to (d) in all of the printed materials it distributes through its lead public education program. Water systems may delete information pertaining to lead service lines upon approval by the department if no lead service lines exist anywhere in the water system service area. Any additional information presented by a system shall be consistent with the following information and be in plain English that can be understood by laypeople.

(a) *Introduction.* The United States Environmental Protection Agency (EPA) and [insert name of water supplier] are concerned about lead in your drinking water. Some drinking water samples taken from this facility have lead levels above the EPA action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). Under federal law we are required to have a program in place to minimize lead in your drinking water by [insert date when corrosion control will be completed for your system]. This program includes corrosion control treatment, source water treatment, and public education. We are also required to replace the portion of each lead service line that we own if the line contributes lead concentrations of more than 15 ppb after we have completed the comprehensive treatment program. If you have any questions about how we are carrying out the requirements of the lead rule please give us a call at [insert water system's phone number]. This brochure explains the simple steps you can take to protect yourself by reducing your exposure to lead in drinking water.

(b) *Health effects of lead.* Lead is found throughout the environment in lead-based paint, air, soil, household dust, food, certain types of pottery porcelain and pewter, and water. Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells and kidneys. The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes into contact with sources of lead contamination--like dirt and dust--that rarely affect an

adult. It is important to wash children's hands and toys often, and to try to make sure they only put food in their mouths.

(c) *Lead in drinking water.* 1. Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. The EPA estimates that drinking water can make up 20 percent or more of a person's total exposure to lead.

2. Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome-plated brass faucets, and in some cases, pipes made of lead that connect houses and buildings to water mains (service lines). In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8.0%.

3. When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon if the water has not been used all day, can contain fairly high levels of lead.

(d) *Steps you can take to reduce exposure to lead in drinking water.* 1. Let the water run from the tap before using it for drinking or cooking any time the water in a faucet has gone unused for more than six hours. The longer water resides in plumbing the more lead it may contain. Flushing the tap means running the cold water faucet for about 15-30 seconds. Although toilet flushing or showering flushes water through a portion of the plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your health. It usually uses less than one gallon of water.

2. Do not cook with, or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. If you need hot water, draw water from the cold tap and then heat it.

3. The steps described above will reduce the lead concentrations in your drinking water. However, if you are still concerned, you may wish to use bottled water for drinking and cooking.

4. You can consult a variety of sources for additional information. Your family doctor or pediatrician can perform a blood test for lead and provide you with information about the health effects of lead. State and local government agencies that can be contacted include:

a. [insert the name or title of facility official if appropriate] at [insert phone number] can provide you with information about your facility's water supply; and

b. [insert the name or title of the state health department] at [insert phone number] or [insert the name of the city or county health department] at [insert phone number] can provide you with information about the health effects of lead.

SECTION 13. NR 809.546(3)(b) (intro.), 1., 2. and 3.(intro.) are amended to read:

NR 809.546(3)(b) (intro.) The owner or operator of a community water system that ~~fails to meet~~ exceeds the lead action level on the basis of tap water samples collected in accordance with s. NR 809.547, and that is not already repeating public education tasks pursuant to sub. (3)(c), (g) or (h), shall, within 60 days:

1. Insert notices in each customer's water utility bill containing the information in ~~par. (a)~~ sub. (1), along with the following alert on the water bill itself in large print:

“SOME HOMES IN THIS COMMUNITY HAVE ELEVATED LEAD LEVELS IN THEIR DRINKING WATER. LEAD CAN POSE A SIGNIFICANT RISK TO YOUR HEALTH. PLEASE READ THE ENCLOSED NOTICE FOR FURTHER INFORMATION.”

2. Submit the information in ~~sub. subs.(1) and (1m)~~ to the editorial departments of the major daily and weekly newspapers circulated throughout the community.

3.(intro.) Deliver pamphlets ~~and/or~~ or brochures or both that contain the public education materials in ~~sub. subs. (1)(b) and (d) and (1m)(b) and (d)~~ to facilities and organizations, including the following:

SECTION 14. NR 809.546(3)(b)5. is created to read:

NR 809.546(3)(b)5. A community water system having a billing cycle that does not include a billing within 60 days of exceeding the action level, or that cannot insert information in the water utility bill without making major changes to its billing system, may use a separate mailing to deliver the information in par. (a) as long as the information is delivered to each customer within 60 days of exceeding the action level. Water systems shall also include the "alert" language specified in subd. 1.

SECTION 15. NR 809.546(3)(d) (intro.) and 2. are amended to read:

NR 809.546(3)(d) (intro) Within 60 days after it exceeds the lead action level, unless it already is repeating public education tasks pursuant to par. (e), a non-transient, non-community water system owner or operator shall deliver the public education materials contained in sub. ~~(1)(a), (b) and (d) (1m)(a), (b) and (d)~~ as follows:

2. Distribute informational pamphlets ~~and/or~~ or brochures or both on lead in drinking water to each person served by the non-transient, non-community water system. The department may allow the system to utilize electronic transmission in lieu of or combined with printed materials as long as it achieves at least the same coverage.

SECTION 16. NR 809.546(3)(g) and (h) are created to read:

NR 809.546(3)(g) A community water system may apply to the department, in writing, unless the department has waived the requirement for prior department approval, to use the text specified in sub. (1)(b) in lieu of the text in sub. (1)(a) and to perform the tasks listed in pars. (d) and (e) in lieu of the tasks in pars. (b) and (c) if the system meets the following requirements:

1. The system is a facility, such as a prison or a hospital, where the population served is not capable of or is prevented from making improvements to plumbing or installing point of use treatment devices.

2. The system provides water as part of the cost of services provided and does not separately charge for water consumption.

(h) 1. A community water system serving 3,300 or fewer people may omit the task contained in par. (b)4. As long as it distributes notices containing the information contained in sub. (1)(a) to every household served by the system, systems may further limit their public education programs as follows:

a. Systems serving 500 or fewer people may forego the task contained in par. (b)2. The system may limit the distribution of the public education materials required under par. (b)3 to facilities and organizations served by the system that are most likely to be visited regularly by pregnant women and children, unless it is notified by the department in writing that it shall make a broader distribution.

b. If approved by the department in writing, a system serving 501 to 3,300 people may omit the task in par. (b)2. or limit the distribution of the public education materials required under par. (b)3. or both to facilities and organizations served by the system that are most likely to be visited regularly by pregnant women and children.

2. A community water system serving 3,300 or fewer people that delivers public education in accordance with par. (h)1. shall repeat the required public education tasks at least once during each calendar year in which the system exceeds the lead action level.

SECTION 17. NR 809.547(1)(e) and (g) are amended to read:

NR 809.547(1)(e) Any community water system with insufficient tier 1 and tier 2 sampling sites shall complete its sampling pool with “tier 3 sampling sites”, consisting of single family structures that contain copper pipes with lead solder installed before 1983. A community water system with insufficient tier 1, tier 2 and tier 3 sampling sites shall complete its sampling pool with representative sites throughout the distribution system. For the purpose of this paragraph, a representative site is a site at which the plumbing materials used at that site would be commonly found at other sites served by the water system.

(g) A non-transient, non-community water system with insufficient tier 1 sites that meet the targeting criteria in par. (f) shall complete its sampling pool with sampling sites that contain copper pipes with lead solder installed before 1983. If additional sites are needed to complete the sampling pool, the non-transient non-community water system shall use representative sites throughout the distribution system. For the purpose of this paragraph, a representative site is a site at which the plumbing materials used at that site would be commonly found at other sites served by the water system.

SECTION 18. NR 809.547(1)(h) is repealed.

SECTION 19. NR 809.547(1)(i) is renumbered as (h) and amended to read:

NR 809.547(1)(h) Any water system owner or operator whose distribution system contains lead service lines shall draw 50% of the samples collected during each monitoring period from sites that contain lead pipes, or copper pipes with lead solder, and 50% of those samples from sites served by a lead service line. A water system owner or operator who cannot identify a sufficient number of sampling sites served by a lead service line shall ~~demonstrate in a letter submitted to the department under s. NR 809.55(1)(f) why the system owner or operator was unable to locate a sufficient number of such sites. Such a water system owner or operator shall~~ collect first draw samples from all of the sites identified as being served by such lines.

SECTION 20. NR 809.547(2)(a) and (b) are amended to read:

NR 809.547(2)(a) All tap samples for lead and copper collected in accordance with this subchapter, with the exception of lead service line samples collected under s. NR 809.545(3) and samples collected under par. (e), shall be first draw samples.

(b) Each first-draw tap sample for lead and copper shall be one liter in volume and have stood motionless in the plumbing system of each sampling site for at least 6 hours. First-draw samples from residential housing shall be collected from the cold water kitchen tap or bathroom sink tap. First-draw samples from a nonresidential building shall be collected at an interior tap from which water is typically drawn for consumption. Non-first-draw samples collected in lieu of first-draw samples pursuant to par. (e) shall be one liter in volume and shall be collected at an interior tap from which water is typically drawn for consumption. First-draw samples may be collected by the system or the system may allow residents to collect first-draw samples after instructing the residents of the sampling procedures specified in this paragraph. To avoid problems of residents handling nitric acid, acidification of first-draw samples may be done up to 14 days after the sample is collected. After acidification to resolubilize the metals, the sample shall stand in the original container for the time specified in the approved EPA method before the sample can be analyzed. If a system allows residents to perform sampling, the system may not challenge, based on alleged errors in sample collection, the accuracy of sampling results.

SECTION 21. NR 809.547(2)(e) is created to read:

NR 809.547(2)(e) The owner or operator of a non-transient non-community water system or a community water system that meets the criteria of s. NR 809.546(3)(g)1. and 2., that does not have enough taps that can supply first-draw samples, may apply to the department in writing to substitute non-first-draw samples. Owners and operators of these water systems shall collect as many first-draw samples from appropriate taps as possible and identify sampling times and locations that would likely result in the longest standing time for the remaining sites. The department may waive the requirement for prior departmental approval of non-first-draw sample sites selected by the system, either through department rule or written notification to the system.

SECTION 22. NR 809.547(3) and (4)(d)2. to 4. are amended to read:

NR 809.547(3) NUMBER OF SAMPLES. Water system owners or operators shall collect at least one sample during each monitoring period specified in sub. (4) from the number of sites listed in the following column titled “standard monitoring.” A system owner or operator conducting reduced monitoring under sub. (4)(d) may collect one sample from the number of sites specified in the second following column during each monitoring period specified in sub. (4)(d). The department may specify sampling locations when a system is conducting reduced monitoring.

System Size (# People Served)	# of Sites (Standard Monitoring)	# of Sites Reduced Monitoring
>100,000	100	50
10,001 to 100,000	60	30
3,301 to 10,000	40	20
501 to 3,300	20	10
101 to 500	10	5
≥ 100	5	5

(4)(d)2. Any water system owner or operator that maintains the range of values for the water quality control parameters reflecting optimal corrosion control treatment specified by the department under s. NR 809.543(6) during each of 2 consecutive 6-month monitoring periods may request that the department allow the system owner or operator to reduce the frequency of monitoring to once per year and reduce the number of lead and copper samples in accordance with sub. (3), if it receives written approval from the department. The department shall review ~~the monitoring, treatment, and other relevant~~ information submitted by the water system owner or operator in accordance with s. NR 809.55, and shall make its decision in writing, setting forth the basis for its determination ~~notify the system in writing when it determines the system is eligible to commence reduced monitoring.~~ The department shall review, and where appropriate, revise its determination when the system owner or operator submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling becomes available.

3. The owner or operator of a small or medium-size water system that meets the lead and copper action levels during 3 consecutive years of monitoring may reduce the frequency of monitoring for lead and copper from annually to once every 3 years. Any owner or operator of a water system that maintains the range of values for the water quality control parameters reflecting optimal corrosion control treatment specified by the department under s. NR 809.543(6) during 3 consecutive years of monitoring may ~~request that the department allow the system owner or operator to~~ reduce the frequency of monitoring from annually to once every 3 years if it receives written approval from the department. The department shall review ~~the monitoring, treatment and other relevant~~ information submitted by the water system owner or operator in accordance with s. NR 809.55, and shall make its decision in writing, setting forth the basis for its determination ~~notify the system in writing when it determines the system is~~ eligible to reduce the frequency of monitoring to once every 3 years. The department shall review, and where appropriate, revise its determination when the water supplier submits new monitoring or treatment data, or when other data relevant to the number and frequency of tap sampling becomes available.

4. A water system owner or operator that reduces the number and frequency of sampling shall collect these samples from representative sites included in the pool of targeted sampling sites identified in sub. (1). System

owners or operators sampling annually or less frequently shall conduct the lead and copper tap sampling during the months of June, July, August or September unless the department has approved a different sampling.

SECTION 23. NR 809.547(4)(d)4.a. and b. are created to read:

NR 809.547(4)(d)4.a. The department may approve a different period for conducting the lead and copper tap sampling for systems collecting a reduced number of samples. A period shall be no longer than 4 consecutive months and shall represent a time of normal operation where the highest levels of lead are most likely to occur. For a non-transient non-community water system that does not operate during the months of June through September, and for which the period of normal operation where the highest levels of lead are most likely to occur is not known, the department shall designate a period that represents a time of normal operation for the system.

b. Systems monitoring annually, that have been collecting samples during the months of June through September and that receive department approval to alter their sample collection period under this subd. 4.a. shall collect their next round of samples during a time period that ends no later than 21 months after the previous round of sampling. Systems monitoring triennially that have been collecting samples during the months of June through September, and receive department approval to alter the sampling collection period as under this subd. 4.a. shall collect their next round of samples during a time period that ends no later than 45 months after the previous round of sampling. Subsequent rounds of sampling shall be collected annually or triennially, as required by this section. Small water systems with waivers, granted pursuant to sub. (7), that have been collecting samples during the months of June through September and receive department approval to alter their sample collection period under this subd. 4.a. shall collect their next round of samples before the end of the 9-year period.

SECTION 24. NR 809.547(4)(d)5. is repealed and recreated to read:

NR 809.547(4)(d)5. Any water system owner or operator that demonstrates for 2 consecutive 6-month monitoring periods that the tap water lead level computed under s. NR 809.541(3)(c) is less than or equal to 0.005 mg/L and the tap water copper level computed under s. NR 809.541(3)(c) is less than or equal to 0.65 mg/L may reduce the number of samples in accordance with sub. (3) and reduce the frequency of sampling to once every 3 calendar years.

SECTION 25. NR 809.547(4)(d)6. to 8., (6) and (7) are created to read:

NR 809.547(4)(d)6.a. Water suppliers for a small or medium-sized water system subject to reduced monitoring that exceeds the lead or copper action level shall resume sampling in accordance with par. (c) and collect the number of samples specified for standard monitoring under sub. (3). A system owner or operator shall also conduct water quality parameter monitoring in accordance with s. NR 809.548(2), (3) or (4) during the monitoring period in which the action level was exceeded. Any water system subject to reduced monitoring frequency that fails to operate within the range of values for the water quality control parameters specified by the department under s. NR 809.543(6) shall resume tap water sampling in accordance with par. (c) and collect the number of samples specified for standard monitoring under sub. (3).

b. Any water system subject to the reduced monitoring frequency that fails to operate at or above the minimum value or within the range of values for the water quality parameters specified by the department under s. NR 809.543(6) for more than 9 days in any 6-month period specified in s. NR 809.548(4) shall conduct tap water sampling for lead and copper at the frequency specified in par. (c), collect the number of samples specified for standard monitoring under sub. (3), and shall resume monitoring for water quality parameters within the distribution system in accordance with s. NR 809.548(4).

7. Any water system conducting tap monitoring for lead and copper under par. (b) may resume reduced monitoring for lead and copper at the tap and for water quality parameters within the distribution system under the following conditions:

a. The system may resume annual monitoring for lead and copper at the tap at the reduced number of sites specified in sub. (3) after it has completed 2 subsequent 6-month rounds of monitoring that meet the criteria subd. 2. and the system has received written approval from the department that it is appropriate to resume reduced monitoring on an annual frequency.

b. The system may resume triennial monitoring for lead and copper at the tap at the reduced number of sites after it demonstrates through subsequent rounds of monitoring that it meets the criteria of either subd. 3. or 5. and the system has received written approval from the department that it is appropriate to resume triennial monitoring.

c. The system may reduce the number of water quality parameter tap water samples required in accordance with s. NR 809.548(5)(a) and the frequency with which it collects such samples in accordance with s. NR 809.548(5)(b). A system may not resume triennial monitoring for water quality parameters at the tap until it demonstrates, in accordance with the requirements of s. NR 809.548(5)(b), that it has re-qualified for triennial monitoring.

8. Any water system subject to a reduced monitoring frequency under this paragraph that either adds a new source of water or changes any water treatment shall inform the department in writing in accordance with s. NR 809.55(1)(e). The department may require the system to resume sampling in accordance with sub. (2)(c) and collect the number of samples specified for standard monitoring under sub. (3) or take other appropriate steps such as increased water quality parameter monitoring or re-evaluation of its corrosion control treatment given the potentially different water quality considerations.

(6) INVALIDATION OF LEAD OR COPPER TAP WATER SAMPLES. A sample invalidated under this subsection does not count toward determining lead or copper 90th percentile levels under s. NR 809.541(3)(c) or toward meeting the minimum monitoring requirements of sub. (3).

(a) The department may invalidate a lead or copper tap water sample if at least one of the following conditions is met.

1. The laboratory establishes that improper sample analysis caused erroneous results.
2. The department determines that the sample was taken from a site that did not meet the site selection criteria of this section.
3. The sample container was damaged in transit.
4. There is substantial reason to believe that the sample was subject to tampering.

(b) The system shall report the results of all samples to the department and all supporting documentation for samples the system believes should be invalidated.

(c) To invalidate a sample under par. (a), the decision and the rationale for the decision shall be documented in writing. The department may not invalidate a sample solely on the grounds that a follow-up sample result is higher or lower than that of the original sample.

(d) The water system owner or operator shall collect replacement samples for any samples invalidated under this subsection if, after the invalidation of one or more samples, the system has too few samples to meet the minimum requirements of sub. (3). Any replacement samples shall be taken as soon as possible, but no later than 20 days after the date the department invalidates the sample or by the end of the applicable monitoring period, whichever occurs later. Replacement samples taken after the end of the applicable monitoring period may not also be used to meet the monitoring requirements of a subsequent monitoring period. The replacement samples shall be taken at the same locations as the invalidated samples or, if that is not possible, at locations other than those already used for sampling during the monitoring period.

(7) MONITORING WAIVERS FOR SMALL WATER SYSTEMS. The owner or operator of any small water system that meets the criteria of this subsection may apply to the department to reduce the frequency of monitoring for lead and copper under this section to once every 9 years, also known as a "full waiver," if it meets all of the materials

criteria specified in par. (a) and all of the monitoring criteria specified in par. (b). If department rules permit, any small water system that meets the criteria in pars. (a) and (b) only for lead, or only for copper, may apply to the department for a waiver to reduce the frequency of tap water monitoring to once every 9 years for that contaminant only, also known as a "partial waiver."

(a) *Materials criteria.* The system owner or operator shall demonstrate that its distribution system and service lines and all drinking water supply plumbing, including plumbing conveying drinking water within all residences and buildings connected to the system, are free of lead-containing materials or copper-containing materials, as those terms are defined in this paragraph, as follows:

1. 'Lead.' To qualify for a full waiver, or a waiver of the tap water monitoring requirements for lead, hereafter known as a "lead waiver," the water system owner or operator shall provide certification and supporting documentation to the department that the system is free of all lead-containing materials, as follows:

a. It contains no plastic pipes which contain lead plasticizers, or plastic service lines which contain lead plasticizers; and

b. It is free of lead service lines, lead pipes, lead soldered pipe joints, and leaded brass or bronze alloy fittings and fixtures, unless the fittings and fixtures meet the specifications of any standard established pursuant to 42 USC 300g-6(e).

Note: 42 USC 300g-6(e) is section 1417 (e) of the federal Safe Drinking Water Act.

2. 'Copper.' To qualify for a full waiver, or a waiver of the tap water monitoring requirements for copper, hereafter known as a "copper waiver," the water system owner or operator shall provide certification and supporting documentation to the department that the system contains no copper pipes or copper service lines.

(b) *Monitoring criteria for waiver issuance.* The system shall have completed at least one 6-month round of standard tap water monitoring for lead and copper at sites approved by the department and from the number of sites required by sub. (3) and demonstrate that the 90th percentile levels for any and all rounds of monitoring conducted since the system became free of all lead-containing and copper-containing materials, as appropriate, meet the following criteria:

1. 'Lead levels.' To qualify for a full waiver, or a lead waiver, the system shall demonstrate that the 90th percentile lead level does not exceed 0.005 mg/L.

2. 'Copper levels.' To qualify for a full waiver, or a copper waiver, the system shall demonstrate that the 90th percentile copper level does not exceed 0.65 mg/L.

(c) *Department approval of waiver application.* The department shall notify the system owner or operator of its waiver determination, in writing, setting forth the basis of its decision and any condition of the waiver. As a condition of the waiver, the department may require the system owner or operator to perform specific activities, such as limited monitoring, periodic outreach to customers to remind them to avoid installation of materials that might void the waiver, to avoid the risk of lead or copper concentration of concern in tap water. The small water system shall continue monitoring for lead and copper at the tap as required by sub. (4)(a) to (d), as appropriate, until it receives written notification from the department that the waiver has been approved.

(d) *Monitoring frequency for systems with waivers.* 1. A system owner or operator with a full waiver shall conduct tap water monitoring for lead and copper in accordance with sub. (4)(d)4. at the reduced number of sampling sites identified in sub. (3) at least once every 9 years and provide the materials certification specified in par. (a) for both lead and copper to the department along with the monitoring results.

2. A system owner or operator with a partial waiver shall conduct tap water monitoring for the waived contaminant in accordance with sub. (4)(d)4. at the reduced number of sampling sites specified in sub. (3) at least once every 9 years and provide the materials certification specified in par. (a) pertaining to the waived contaminant

along with the monitoring results. The system owner or operator shall also continue to monitor for the non-waived contaminant in accordance with requirements of sub. (4)(a) to (d), as appropriate.

3. If a system with a full or partial waiver adds a new source of water or changes any water treatment, the system owner or operator shall notify the department in writing in accordance with s. NR 809.55(1)(e). The department has the authority to require the system to add or modify waiver conditions. The department may require recertification that the system is free of lead-containing or copper-containing materials, or both, require additional rounds of monitoring, if it deems the modifications are necessary to address treatment or source water changes at the system.

4. If a system with a full or partial waiver becomes aware that it is no longer free of lead-containing or copper-containing materials as a result of new construction or repairs, the system owner or operator shall notify the department in writing no later than 60 days after becoming aware of a change.

(e) *Continued eligibility.* If the system continues to satisfy the requirements of par. (d), the waiver shall be renewed automatically, unless any of the conditions listed in subds. 1. to 3. occurs. A system whose waiver has been revoked may re-apply for a waiver at a time as it again meets the appropriate materials and monitoring criteria of pars. (a) and (b).

1. A system with a full waiver or a lead waiver no longer satisfies the materials criteria of par. (a)1. if the 90th percentile lead level is greater than 0.005 mg/L.

2. A system with a full waiver or a copper waiver no longer satisfies the materials criteria of par. (a)2. if the 90th percentile copper level is greater than 0.65 mg/L.

3. The department notifies the system owner or operator, in writing, that the waiver has been revoked, setting forth the basis of its decision.

(f) *Requirements following waiver revocation.* A system whose full or partial waiver has been revoked by the department is subject to the corrosion control treatment and lead and copper tap water monitoring requirements, as follows:

1. If the system exceeds the lead or copper action level, or both, the system shall implement corrosion control treatment in accordance with the deadlines specified in s. NR 809.542(5), and any other applicable requirements of this paragraph.

2. If the system meets both the lead and the copper action level, the system shall monitor for lead and copper at the tap no less frequently than once every 3 years using the reduced number of sample sites specified in sub. (3).

(g) *Pre-existing waivers.* Small water system waivers approved by the department in writing prior to April 11, 2000 shall remain in effect under the following conditions:

1. If the system has demonstrated that it is both free of lead-containing and copper-containing materials, as required by par. (a) and that its 90th percentile lead levels and 90th percentile copper levels meet the criteria of par. (b), the waiver remains in effect so long as the system continues to meet the waiver eligibility criteria of par. (e). The first round of tap water monitoring conducted pursuant to par. (d) shall be completed no later than 9 years after the last time the system has monitored for lead and copper at the tap.

2. If the system has met the materials criteria of par. (a) but has not met the monitoring criteria of par. (b), the system shall conduct a round of monitoring for lead and copper at the tap demonstrating that it meets the criteria of par. (b) to meet initial monitoring requirements. Thereafter, the waiver shall remain in effect as long as the system meets the continued eligibility criteria of par. (e). The first round of tap water monitoring conducted pursuant to par. (d) shall be completed no later than 9 years after the round of monitoring conducted pursuant to par. (b).

SECTION 26. NR 809.548(1)(b)2. is amended to read:

NR 809.548(1)(b)2. ~~Water~~ Except as provided in sub. (3)(c), water suppliers shall collect 2 samples for each applicable water quality parameter at each entry point to the distribution system during each monitoring period specified in sub. (2). ~~During each monitoring period specified in subs. (3) to (5), system owners or operators shall collect one sample for each applicable water quality parameter at each entry point to the distribution system.~~

SECTION 27. NR 809.548(3)(b)(intro.) is amended to read:

NR 809.548(3)(b)(intro.) ~~At~~ Except as provided in par. (c), at each entry point to the distribution system, one sample every 2 weeks (bi-weekly) for:

SECTION 28. NR 809.548(3)(c) is created to read:

NR 809.548(3)(c) Any ground water system can limit entry point sampling described in par. (b) to those entry points that are representative of water quality and treatment conditions throughout the system. If water from untreated ground water sources mixes with water from treated ground water sources, the system shall monitor for water quality parameters both at representative entry points receiving treatment and representative entry points receiving no treatment. Prior to the start of any monitoring under this subsection, the system shall provide to the department written information identifying the selected entry points and documentation, including information on seasonal variability, sufficient to demonstrate that the sites are representative of water quality and treatment conditions throughout the system.

SECTION 29. NR 809.548(4) is amended to read:

NR 809.548(4) MONITORING AFTER THE DEPARTMENT SPECIFIES WATER QUALITY PARAMETER VALUES FOR OPTIMAL CORROSION CONTROL. After the department specifies the values for applicable water quality control parameters reflecting optimal corrosion control treatment under s. NR 809.543(6), water system owners or operators for all large systems shall measure the applicable water quality parameters in accordance with sub. (3) ~~during each monitoring period specified in s. NR 809.547(4)(c) and determine compliance with the requirements of s. NR 809.543(8) every 6 months with the first 6-month period to begin on the date the department specifies the optimal values under s. NR 809.543(6).~~ Water system owners or operators for any small or medium-size system shall conduct monitoring during each ~~monitoring 6-month~~ period specified in s. NR 809.547(4)(c) in which the system exceeds the lead or copper action level. ~~The system owner or operator may take a confirmation sample for any water quality parameter value no later than 3 days after the first sample. If a confirmation sample is taken, the result shall be averaged with the first sampling result and the average shall be used for any compliance determinations under s. NR 809.543(7). The department has discretion to delete results of obvious sampling errors from this calculation.~~ For any small and medium-size system that is subject to a reduced monitoring frequency pursuant to s. NR 809.547(4)(d) at the time of the action level exceedance, the end of the applicable 6-month period under this paragraph shall coincide with the end of the applicable monitoring period under s. NR 809.547(4)(d). Compliance with department-designated optimal water quality parameter values shall be determined as specified under s. NR 809.543(8).

SECTION 30. NR 809.548(5)(b) is renumbered NR 809.548(5)(b)1.

SECTION 31. NR 809.548(5)(b)2. is created to read:

NR 809.548(5)(b)2. A water system may reduce the frequency with which it collects tap samples for applicable water quality parameters specified in par. (a) to every 3 years if it demonstrates during 2 consecutive monitoring periods that its tap water lead level at the 90th percentile is less than or equal to the practical quantitation limit for lead specified in s. NR 809.725(1), Table A, that its tap water copper level at the 90th percentile is less than

or equal to 0.65 mg/L for copper in s. NR 809.541(3)(b), and that it also has maintained the range of values for the water quality parameters reflecting optimal corrosion control treatment specified by the department under s. NR 809.543(6).

SECTION 32. NR 809.548(5)(e) is amended to read:

NR 809.548(5)(e) Any owner or operator that has a water system subject to reduced monitoring frequency that fails to operate within the range of values for the water quality parameters specified by the department under s. NR 809.543(6) ~~shall resume tap water sampling in accordance with the number and frequency requirements in sub. (3) for more than 9 days in any 6-month period specified in s. NR 809.543(8) shall resume distribution system tap water sampling in accordance with the number and frequency requirements in sub. (4). A system may resume annual monitoring for water quality parameters at the tap at the reduced number of sites specified in par. (a) after it has completed 2 subsequent consecutive 6-month rounds of monitoring that meet the criteria of that paragraph or may resume triennial monitoring for water quality parameters at the tap at the reduced number of sites after it demonstrates through subsequent rounds of monitoring that it meets the criteria of either par. (b)1. or 2., or both.~~

SECTION 33. A table following s. NR 809.548(5)(e) is created to read:

Summary of Monitoring Requirements for Water Quality Parameters<sup>1</sup>

Monitoring period	Parameters <sup>2</sup>	Location	Frequency
Initial monitoring	pH, alkalinity, orthophosphate or silica <sup>3</sup> , calcium, conductivity, temperature.	Taps and at entry points to distribution system.	Every 6 months.
After installation of corrosion control	pH, alkalinity, orthophosphate or silica <sup>3</sup> , calcium <sup>4</sup> .	Taps	Every 6 months.
	pH, alkalinity, dosage rate and concentration (if alkalinity adjusted as part of corrosion control), inhibitor dosage rate and inhibitor residual <sup>5</sup> .	Entry points to the distribution system <sup>6</sup> .	No less frequently than every 2 weeks.
After department specifies parameter values for optimal corrosion control	pH, alkalinity, orthophosphate or silica <sup>3</sup> , calcium <sup>4</sup> .	Taps	Every 6 months.
	pH, alkalinity, dosage rate and concentration (if alkalinity adjusted as part of corrosion control), inhibitor dosage rate and inhibitor residual <sup>5</sup> .	Entry points to the distribution system <sup>6</sup> .	No less frequently than every 2 weeks
Reduced monitoring	pH, alkalinity, orthophosphate or silica <sup>3</sup> , calcium <sup>4</sup> .	Taps	Every 6 months, annually <sup>7</sup> or every 3 years <sup>8</sup> , reduced number of sites
	pH, alkalinity, dosage rate and concentration (if alkalinity adjusted as part of corrosion control), inhibitor dosage rate and inhibitor residual <sup>5</sup> .	Entry points to the distribution system <sup>6</sup> .	No less frequently than every 2 weeks

Note: <sup>1</sup> Table is for illustrative purposes; consult the text of this section for precise regulatory requirements.

<sup>2</sup> Small and medium-size systems have to monitor for water quality parameters only during monitoring periods in which the system exceeds the lead or copper action level.

<sup>3</sup> Orthophosphate must be measured only when an inhibitor containing a phosphate compound is used. Silica must be measured only when an inhibitor containing silicate compound is used.

<sup>4</sup> Calcium must be measured only when calcium carbonate stabilization is used as part of corrosion control.

<sup>5</sup> Inhibitor dosage rates and inhibitor residual concentrations (orthophosphate or silica) must be measured only when an inhibitor is used.

<sup>6</sup> Ground water systems may limit monitoring to representative locations throughout the system.

<sup>7</sup> Water systems may reduce frequency of monitoring for water quality parameters at the tap from every 6 months to annually if they have maintained the range of values for water quality parameters reflecting optimal corrosion control during 3 consecutive years of monitoring.

<sup>8</sup> Water systems may further reduce the frequency of monitoring for water quality parameters at the tap from annually to once every 3 years if they have maintained the range of values for water quality parameters reflecting optimal corrosion control during 3 consecutive years of annual monitoring. Water systems may accelerate to triennial monitoring for water quality parameters at the tap if they have maintained 90th percentile lead levels less than or equal to 0.005 mg/L, 90th percentile copper levels less than or equal to 0.65 mg/L, and the range of water quality parameters designated by the department under s. NR 809.543(7) as representing optimal corrosion control during 2 consecutive 6-month monitoring periods.

SECTION 34. NR 809.549(1)(a) is amended to read:

NR 809.549(1)(a) The owner or operator of a water system that fail to meet the lead or copper action level on the basis of tap samples collected in accordance with s. NR 809.547 shall collect lead and copper source water samples in accordance with the requirements regarding sample location, number of samples and collection methods specified in s. NR 809.12(1)(a) to (c). ~~The timing of sampling for lead and copper shall be in accordance with subs. (2) and (3), and not dates specified in s. NR 809.12(1)(a) and (b).~~ ;

SECTION 35. NR 809.549(1)(a)1. to 4. are created to read:

NR 809.549(1)(a)1. The owner or operator of groundwater systems shall take a minimum of one sample at every entry point to the distribution system which is representative of each well after treatment. The system shall take one sample at the same sampling location unless conditions make another sampling location more representative of each source or treatment plant.

2. The owner or operator of surface water systems shall take a minimum of one sample at every entry point to the distribution system after any application of treatment or in the distribution system at a point which is representative of each source after treatment. The system shall take each sample at the same sampling location unless conditions make another sampling location more representative of each source or treatment plant. For the purposes of this paragraph, surface water systems include systems with a combination of surface and ground sources.

3. If a system draws water from more than one source and the sources are combined before distribution, the system shall sample at an entry point to the distribution system during periods of normal operating conditions, and when water is representative of all sources being used.

4. The department may reduce the total number of samples which are to be analyzed by allowing the use of compositing. Compositing of samples shall be done by certified laboratory personnel. Composite samples from a maximum of 5 samples are allowed, provided that if the lead concentration in the composite sample is greater than or equal to 0.001 mg/L or the copper concentration is greater than or equal to 0.160 mg/ L, either:

a. A follow-up sample shall be taken and analyzed within 14 days at each sampling point included in the composite; or

b. If duplicates of or sufficient quantities from the original samples from each sampling point used in the composite are available, the system may use these instead of resampling.

SECTION 36. NR 809.549(5)(a) is renumbered NR 809.549(5)(a) (intro.) and is amended to read:

NR 809.549(5)(a)(intro.) A water system using only groundwater ~~which demonstrates that finished drinking water entering the distribution system has been maintained below the maximum permissible lead or copper concentrations or both specified by the department in s. NR 809.544(2)(d) during at least 3 consecutive compliance periods under sub. (4)(a)~~ may reduce the monitoring frequency for lead or copper or both in source water to once during each 9-year compliance cycle: if the system meets one of the following criteria:

SECTION 37. NR 809.549(5)(a)1. and 2. are created to read:

NR 809.549(5)(a)1. The system demonstrates that the finished drinking water entering the distribution system has been maintained below the maximum permissible lead and copper concentrations specified by the department in s. NR 809.544(2)(d) during at least 3 consecutive compliance periods under sub. (4)(a).

2. The department has determined that source water treatment is not needed and the system demonstrates that, during at least 3 consecutive compliance periods in which sampling was conducted under sub. (4)(a), the concentration of lead in source water was less than or equal to 0.005 mg/L and the concentration of copper in source water was less than or equal to 0.65 mg/L.

SECTION 38. NR 809.549(5)(b) is amended to read:

NR 809.549(5)(b) A water system using surface water, or a combination of surface and groundwater ~~which demonstrates that finished drinking water entering the distribution system has been maintained below the maximum permissible lead and copper concentrations specified by the department in s. NR 809.544(2)(d) for at least 3 consecutive years~~ may reduce the monitoring frequency in sub. (4)(a) to once during each 9-year compliance cycle: if the system meets one of the following criteria:

SECTION 39. NR 809.549(5)(b)1. and 2. are created to read:

NR 809.549(5)(b)1. The system demonstrates that finished drinking water entering the distribution system has been maintained below the maximum permissible lead and copper concentrations specified by the department in s. NR 809.544(2)(d) for at least 3 consecutive years.

2. The department has determined that source water treatment is not needed and the system demonstrates that, during at least 3 consecutive years, the concentration of lead in source water was less than or equal to 0.005 mg/L and the concentration of copper in source water was less than or equal to 0.65 mg/L.

SECTION 40. NR 809.55(1)(c)(intro.) is amended to read:

NR 809.55(1)(c)(intro.) ~~A-Except as provided in subd. 8., a water system owner or operator shall report the following information for all tap water samples specified in s. NR 809.547 and for all water quality parameter samples specified in s. NR 809.548 within the first 10 days following the end of each applicable monitoring period specified in ss. NR 809.547, 809.548 and 809.549, i.e., every 6 months~~ 6 months, annually, or every 3 years:-

SECTION 41. NR 809.55(1)(c)2. is repealed and recreated to read:

NR 809.55(1)(c)2. Documentation for each tap water lead or copper sample for which the water system requests invalidation pursuant to s. NR 809.547(6)(b).

SECTION 42. NR 809.55(1)(c)3. is repealed.

SECTION 43. NR 809.55(1)(c)4. is amended to read:

NR 809.55(1)(c)4. The 90<sup>th</sup> percentile lead and copper concentrations measured from among all lead and copper tap water samples collected during each monitoring period; calculated in accordance with s. NR 809.541(3)(c), unless the department calculates the system's 90<sup>th</sup> percentile lead and copper levels under sub. (8).

SECTION 44. NR 809.55(1)(c)8. is created to read:

NR 809.55(1)(c)8. A water system owner or operator shall report the results of all water quality parameter samples collected under s. NR 809.548(3) to (6) during each 6-month monitoring period specified in s. NR 809.548(4) within the first 10 days following the end of the monitoring period unless the department has specified a more frequent reporting requirement.

SECTION 45. NR 809.55(1)(d) to (g) are repealed and recreated to read:

NR 809.55(1)(d) For the owner or operator of a non-transient non-community water system, or the owner or operator of a community water system meeting the criteria of s. NR 809.546(3)(g)1. and 2., that does not have enough taps that can provide first-draw samples, the system owner or operator shall complete one of the following:

1. Provide written documentation to the department identifying standing times and locations for enough non-first-draw samples to make up its sampling pool under s. NR 809.547(1) by the start of the first applicable monitoring period under s. NR 809.547(4) that commences after April 11, 2000, unless the department has waived prior departmental approval of non-first-draw sample sites selected by the system pursuant to s. NR 809.547(2)(e).

2. If the department has waived prior approval of non-first-draw sample sites selected by the system, identify, in writing, each site that did not meet the 6-hour minimum standing time and the length of standing time for that particular substitute sample collected pursuant to s. NR 809.547(2)(e) and include this information with the lead and copper tap sample results required to be submitted pursuant to par. (c)1.

(e) No later than 60 days after the addition of a new source or any change in water treatment, unless the department requires earlier notification, a water system deemed to have optimized corrosion control under s. NR 809.542(2)(c), a water system subject to reduced monitoring pursuant to s. NR 809.547(4)(d), or a water system subject to a monitoring waiver pursuant to s. NR 809.547(7), shall send written documentation to the department describing the change.

Note: In those instances where prior department approval of the treatment change or new source is not required, the water system owners or operators are encouraged to provide the notification to the department beforehand to minimize the risk the treatment change or new source will adversely affect optimal corrosion control.

(f) The owner or operator of any small water system applying for a monitoring waiver under s. NR 809.547(7) or subject to a waiver granted pursuant to s. NR 809.547(7)(c), shall provide the following information to the department in writing by the specified deadline:

1. By the start of the first applicable monitoring period in s. NR 809.547(4), the owner or operator of any small water system applying for a monitoring waiver shall provide the documentation required to demonstrate that it meets the waiver criteria of s. NR 809.547(7)(a) and (b).

2. No later than 9 years after the monitoring previously conducted pursuant to s. NR 809.547(7)(b) or (d)1., the owner or operator of each small water system desiring to maintain its monitoring waiver shall provide the information required by s. NR 809.547(7)(d)1. and 2.

3. No later than 60 days after it becomes aware that it is no longer free of lead-containing or copper-containing material, as appropriate, the owner or operator of each small water system with a monitoring waiver shall provide written notification to the department, setting forth the circumstances resulting in the lead-containing and

copper-containing materials being introduced into the system and what corrective action, if any, the system plans to remove these materials.

4. The owner or operator of any small water system with a waiver granted prior to April 11, 2000 and that has not previously met the requirements of s. NR 809.547(7)(b) shall provide the information required by that paragraph as required by the department.

(g) Each groundwater system that limits water quality parameter monitoring to a subset of entry points under s. NR 809.548(3)(c) shall provide, by the commencement of the monitoring, written correspondence to the department that identifies the selected entry points and includes information sufficient to demonstrate that the sites are representative of water quality and treatment conditions throughout the system.

SECTION 46. NR 809.55(5)(d) is repealed and recreated to read:

NR 809.55(5)(d) Any system which collects lead service line samples following partial lead service line replacement required by s. NR 809.545 shall report the results to the department within the first 10 days of the month following the month in which the system receives the laboratory results, or as specified by the department. The department may eliminate this requirement to report these monitoring results. Systems shall also report any additional information as specified by the department, and in a time and manner prescribed by the department, to verify that all partial lead service line replacement activities have taken place.

SECTION 47. NR 809.55(6) is repealed and recreated to read:

NR 809.55(6) PUBLIC EDUCATION PROGRAM REPORTING REQUIREMENTS. By December 31<sup>st</sup> of each year, any water system that is subject to the public education requirements in s. NR 809.546 shall submit a letter to the department demonstrating that the system owner or operator has delivered the public education materials that meet the content requirements in s. NR 809.546(1) and (2) and the delivery requirements in s. NR 809.546(3). This information shall include a list of all the newspapers, radio stations, television stations, facilities and organization to which the system owner or operator delivered public education materials during the previous year. The water system owner or operator shall submit the letter required by this subsection annually for as long as it exceeds the lead action level.

(a) The owner or operator of any water system that is subject to the public education requirements in s. NR 809.546 shall, within 10 days after the end of each period in which the system is required to perform public education tasks in accordance with s. NR 809.546(3), send written documentation to the department that contains the following:

1. A demonstration that the system has delivered the public education materials that meet the content requirements in s. NR 809.546(1) and (2) and the delivery requirements in s. NR 809.546(3).

2. A list of all the newspapers, radio stations, television stations, and facilities and organizations to which the system delivered public education materials during the period in which the system was required to perform public education tasks.

(b) Unless required by the department, the owner or operator of a system that previously has submitted the information required by par. (a)2. is not required to resubmit the information required by par. (a)2., as long as there have been no changes in the distribution list and the system certifies that the public education materials were distributed to the same list submitted previously.

SECTION 48. NR 809.55(8) is created to read

NR 809.55(8) REPORTING OF 90TH PERCENTILE LEAD AND COPPER CONCENTRATIONS WHERE THE DEPARTMENT CALCULATES A SYSTEM'S 90TH PERCENTILE CONCENTRATIONS. The owner or operator of a water

system is not required to report the 90th percentile lead and copper concentrations measured from among all lead and copper tap water samples collected during each monitoring period, as required by sub. (1)(c)4. if any of the following are met:

(a) The department has previously notified the water system that it will calculate the water system's 90th percentile lead and copper concentrations, based on the lead and copper tap results submitted pursuant to par. (b)1., and has specified a date before the end of the applicable monitoring period by which the system shall provide the results of lead and copper tap water samples.

(b) The system owner or operator has provided all of the following information to the department by the date specified in par. (a):

1. The results of all tap samples for lead and copper including the location of each site and the criteria under s. NR 809.547(1)(c), (d), (e), (f) or (g) under which the site was selected for the system's sampling pool, pursuant to sub. (1)(a)1.

2. An identification of sampling sites utilized during the current monitoring period that were not sampled during previous monitoring periods, and an explanation why sampling sites have changed.

(c) The department has provided the results of the 90th percentile lead and copper calculations, in writing, to the water system before the end of the monitoring period.

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on August 14, 2002.

The rules shall take effect on the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22(2)(intro.), Stats.

Dated at Madison, Wisconsin \_\_\_\_\_

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

By \_\_\_\_\_  
Darrell Bazzell, Secretary

(SEAL)